# Johnson Reservoir 2010 Fall Survey Summary



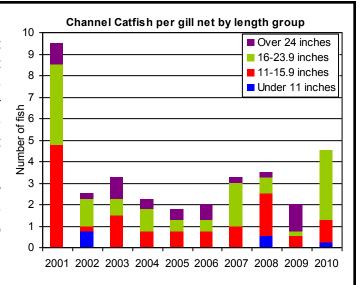
Brad Eifert, Fisheries Biologist

The following text and graphs are the result of netting surveys completed during October 2010 at Johnson Reservoir. For comparative purposes it also shows results from previous years. Fish populations are sampled each fall at Johnson using gill and frame nets. Gill nets are used to sample fish found primarily in open water, such as walleye, while frame nets are used to sample shoreline oriented fish species, such as crappie. The nets are set each year at approximately the same locations and dates as previous years. This reduces variability and allows for comparisons of species abundance and size distribution. The following graphs show the total number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

#### **Channel Catfish**

Channel catfish abundance has historically been low at Johnson Reservoir. The 2010 survey had a slight increase in total catch and the abundance of 16 to 24 inch catfish was improved. There were no fish larger than 24 inches sampled, a first since 2000. The average catfish length was 17.1 inches and the largest fish sampled was 22 inches.

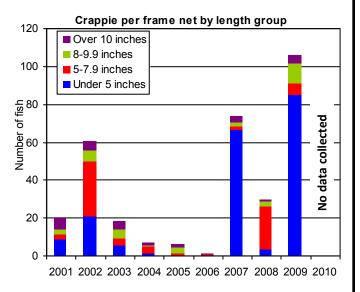
Johnson should continue to offer fair opportunities for catfish anglers. Anglers should also be aware that the statewide bag limit for channel catfish was lowered to five fish per day effective January 1, 2011.



# Crappie

Low water levels at Johnson during the fall of 2010 prevented frame nets from being set, so no crappie data was collected. Crappie abundance has been very good the past three years at Johnson, with fish of all size categories represented. The 2009 survey indicated a large year-class of young-of-the-year fish, which should be approaching harvestable size during 2011.

Johnson has provided anglers very good opportunities for crappie the past several years and this should continue during 2011. Anglers should be aware that the statewide bag limit for panfish was lowered to 15 fish per day effective January 1, 2011.

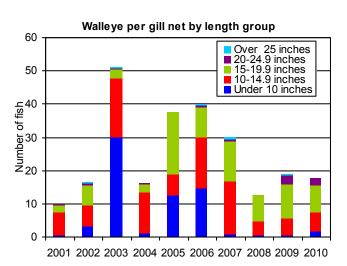


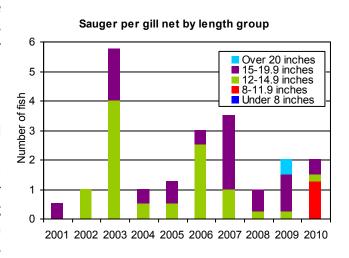
# Walleye/Sauger

Walleye abundance has remained stable the past two years, with a catch of approximately 18 fish per net. Walleye of all size categories were collected, with the exception of fish greater than 25 inches. Recruitment has been excellent the past several years and age-0 through age-5 were all well represented in the sample. The average length of walleye collected during the survey was 15.4 inches and the largest was 23 inches. Approximately 60% of the sample was larger than the 15-inch minimum length limit. Walleye abundance from 20 to 24 inches remains higher than the long term average.

Sauger abundance was unchanged, as there were two fish per net sampled. Approximately half of the sauger catch consisted of age-1 fish (9-11 inches). The average length of sauger in the survey was 12.9 inches and they ranged in length from 9 to 19 inches. Sauger are not stocked in Johnson, but are annually stocked in Midway, Gallagher and Plum Creek Reservoirs.

Good walleye abundance and a high percentage of fish larger than the 15-inch minimum length limit should provide very good angling possibilities during 2011. The abundance of fish greater than 20 inches also remains above average. Opportunities also exist for catching sauger, some of which are approaching master angler size. There is a 15-inch minimum length limit on walleye and sauger at Johnson and anglers may only keep one fish larger than 22 inches per day.

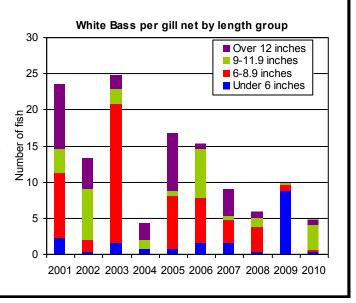




#### White Bass

White bass abundance has generally declined the past several years and the 2010 catch was lowest in five years. The 2009 year-class comprises most of the white bass population, with fish ranging from 9 to 11 inches. These fish should provide good fishing opportunities in the next couple years. There were few fish greater than 12 inches collected in the survey. The average length of white bass was 9.6 inches and the largest fish was 13 inches.

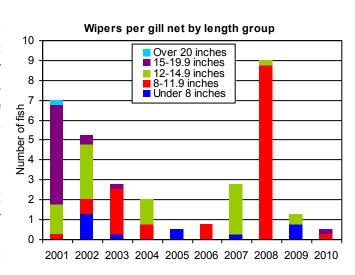
Although densities are lower, a large 2009 year-class should provide fairly good angling opportunities for 10-12 inch white bass during 2011.



### Wipers

Wiper abundance at Johnson Reservoir remains low. With the exception of a high catch during 2008, the gill net catch has remained below three fish per net since 2003. Wipers captured in the 2010 survey ranged from 12 to 17 inches. Wiper stocking was reduced during 2009 and did not occur during 2010 due to a shortage of available fingerlings. Wipers are scheduled to be stocked during 2011, which should help to improve abundance.

With lower wiper abundance, anglers might find it more difficult to catch wipers at Johnson Reservoir during 2011. Opportunities for large wipers should remain fair, as these fish often enter Johnson from the upstream Platte Valley Reservoirs.



#### Additional Information About Johnson Reservoir

#### **Water Level Forecasts**

Current lake elevations for Johnson Reservoir, as well as additional information about Central Nebraska Public Power and Irrigation District can be found at this website: <a href="http://www.cnppid.com/">http://www.cnppid.com/</a> Elevation Flows2.htm

#### **Fish Stocking**

During 2010, there were 219,000 walleye fingerlings stocked in Johnson Reservoir. Fish stockings scheduled for 2011 include 218,900 walleye fingerlings, 43,780 wiper fingerlings, and 65,670 yellow perch fingerlings.



#### Lake Maps

A depth contour map of Johnson Reservoir, as well as many other Nebraska Lakes can be found here: <a href="http://outdoornebraska.ne.gov/fishing/programs/lakemapping/pdfs/Johnson.pdf">http://outdoornebraska.ne.gov/fishing/programs/lakemapping/pdfs/Johnson.pdf</a>

## **Angler Survey**

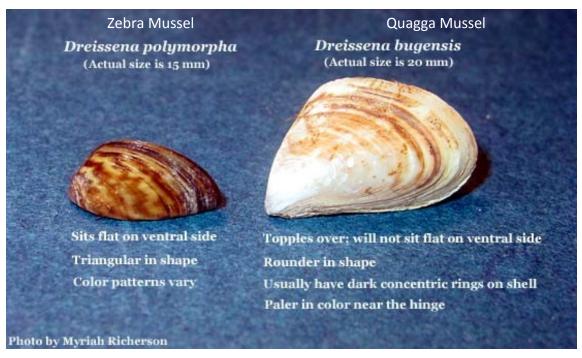
An angler survey will be conducted at Johnson Reservoir during 2011. The survey will be done in conjunction with the University Of Nebraska Cooperative Fish and Wildlife Unit and will start April 1 and will run through the end of October. The survey will involve counting and interviewing anglers on 20 random days each month. Information obtained from this survey includes estimates of angling pressure, catch and harvest, catch per hour, and sizes and types of fish caught. This information will be used to make future management decisions at Johnson Reservoir and other Nebraska reservoirs. Anglers are encouraged to take the time to answer the questions if they are approached by the survey technician, it will only take a few minutes of time and will provide valuable information.



## Zebra & Quagga Mussels

Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes. While no mussels have been identified at Johnson Reservoir, zebra mussels have been confirmed at Zorinsky Lake in Omaha and are present in several reservoirs in Kansas and Colorado. Monitoring was completed at several Nebraska reservoirs during 2010 and no evidence of mussels were found. Unfortunately, adult mussels were found during the fall of 2010 at Zorinsky Lake by a private citizen. This lake is currently closed to public access and efforts are being made to eradicate the mussel population. Statewide monitoring efforts will be expanded in 2011 to determine if mussels are present in other water bodies.

Invasive mussels will attach to almost any surface and have detrimental impacts on industry (power plants, water intakes, irrigation, etc), native fish and mussels, and recreational users (fouling boat motors, impacting beaches, etc). Invasive mussels cause an estimated \$5 billion per year in economic impacts in the United States for monitoring and control efforts. Inadvertent transfer by humans is the major source of new infestation for zebra and quagga mussels; primarily by boats, boat trailers, and fishing gear. Boaters and anglers are reminded that it is important to **clean, drain and dry** their equipment and boats before moving to different bodies of water. Anglers and boaters are encouraged to educate themselves on these and other aquatic invasive species. An excellent source of information regarding invasive species can be found on the University of Nebraska's Invasive Species Project website: <a href="http://snr.unl.edu/invasives/">http://snr.unl.edu/invasives/</a>.







For additional information about fisheries management at Johnson Reservoir, please contact the NGPC Kearney office at 308-865-5310 or by email at the addresses listed below.

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